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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/993,480	11/27/2001	Hung-Liang Chiu	CHIU3010/EM	7114

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EXAMINER	
SANTOS, PATRICK J D	

ART UNIT	PAPER NUMBER
2171	2

DATE MAILED: 03/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Applicati n No.	Applicant(s)	
	09/993,480	CHIU ET AL.	
	Examin r	Art Unit	
	Patrick J Santos	2171	

-- Th MAILING DATE of this communication appears on the cover sheet with th correspondence address --

Peri d f r Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 November 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5* is/are rejected.

7)☒ Claim(s) *3* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *27 November 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claim 3 is objected to because of the following informality: the phrase "comprises and an EDI conversion interface" [Specification: p. 10, clm. 3, lns 16-17] should read "comprises an EDI conversion interface". Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over the publication, "Guidelines for using XML for Electronic Data Interchange" by Martin Bryan, published by the XML/EDI Working Group, 1998 (hereafter Bryan '98), in view of U.S. Patent No. 6,631,379 issued to Cox (hereafter Cox '379), in further view of the publication, "Standardized Electronic Forms Information Interchange: Pilot Project Summary Report" by Osipenko, published by the Electronic Document Standards Working Group (EDSWG) Treasury Board Secretariat, Government of Canada, 1996 (hereafter Osipenko '96), moreover in view of U.S. Patent Application Publication US2001/0009033 A1 by Morisaki et al. (hereafter Morisaki '033).

Claim 1:

Regarding Claim 1, Bryan '98 teaches development guidelines for using XML and EDI. Specifically, Bryan '98 teaches using a management system for parsing and receiving XML based schedules being established between a computer system of a product manufacturer and that of at least one original equipment manufacturer is capable of regularly receiving the XML based schedules from each original equipment manufacturer through the Internet [Bryan '98: Section 3, subsection titled, "Business-to business Electronic Data Interchange" and Section 2, subsection titled, "The standards involved in XML/EDI"]. However, Bryan '98 does not specifically teach:

- reading the received XML based schedules prior to converting into EDI based schedules; and
- integrating the EDI based schedules with the EDI based schedules stored in a database of the system.

Cox '379 teaches an XML data loader. Specifically, Cox '225 teaches reading the received XML based schedules prior to loading data contained into a database (Cox '379: col. 3, ln. 58 to col. 4, ln. 7). However, Cox '379 does not explicitly teach:

- converting into EDI based schedules; and
- integrating the EDI based schedules with the EDI based schedules stored in a database of the system.

Osipenko '96 teaches a DTD specifying an EDI service agreement. Specifically, Osipenko '96 teaches converting into XML data into EDI based schedules (Osipenko '96: Appendix B, Service Agreement DTD). However, Osipenko '96 does not specifically teach:

- integrating the EDI based schedules with the EDI based schedules stored in a database of the system.

Morasaki '033 teaches a database containing EDI data. Specifically, Morasaki '033 teaches integrating the EDI based schedules with the EDI based schedules stored in a database of the system (Morasaki '033: Figs. 1 and 12-13; para [0120]).

It would have been obvious to a person having ordinary skill in the art to combine the XML loader of Cox '379, with the EDI data XML DTD of Osipenko '96, with the EDI database of Morasaki '033 as specified by XML/EDI guidelines of Bryan '98. Note that the DTD of Osipenko '96 applied to the XML loader of Cox '379 as specified by the XML/EDI guidelines of Bryan '98 enables the conversion of XML based schedules into EDI based schedules [Bryan '98: Section 2, subsection titled, "The standards involved in XML/EDI." Specifically, Bryan '98 states:

".. the XMl/EDI Guidelines show how EDIFACT messages (EDI is the term collectively used for EDIFACT messages) can be generated from XML/EDI forms, and vice versa." Furthermore, the loading of XML coded EDIFACT messages as per the DTD of Osipenko '96, when loaded into the database of Morasaki '033 as specified by the guidelines of Bryan '98 constitutes loading EDI data into the EDI database of Morasaki '033. This reads upon integrating EDI based schedules with the EDI based schedules stored in a database of the system.

The motivation to combine the aforesaid technologies is suggested by Bryan '98 which explicitly teaches that:

"XML/EDI can be seen as the fusion of five existing technologies:

1. Web data interchange based on the new XML specification
2. Existing EDI business methods and message structures

3. Knowledge templates that provide process control logic
4. Data manipulation agents (DataBots) that perform specialist functions
5. Data repositories that allow relationships to be maintained "

[Bryan '98: Section 4, section titled, "Base Technlogies of XML/EDI"]

Specifically, items 1 and 2 are addressed by Cox '379 and Osipenko '96 in combination. Items 3, 4, and 5 are addressed by the business rules and database of Morasaki '033. The benefits of this integration of technologies are extensively documented by Bryan '98 [Bryan '98: Section 4, subsection titled, "Why use XML?" and subsection titled, "Integrating XML with EDI"].

Claim 2:

Regarding Claim 2, all the limitations of Claim 1 are taught by Bryan '98, Cox '379, Osipenko '96, and Morasaki '033 in combination (supra). Further note, Cox '379 (of the Bryan '98, Cox '379, Osipenko '96, and Morasaki '033 combination) teaches that the system further comprises an XML parser interface for parsing XML based documents, analyzing a correctness of each element of the received XML based schedule based on an XML syntax and a nested structure rule, and parsing data from the XML based schedule (Cox '379: col. 3, ln. 58 to col. 4, ln. 7). Specifically, the SAX XML parser incorporated by the Cox '379 disclosure fully reads on this limitation.

Claim 3:

Regarding Claim 3, all the limitations of Claim 2 are taught by Bryan '98, Cox '379, Osipenko '96, and Morasaki '033 in combination (supra), Further note, Bryan '98, Cox '379, Osipenko '96, and Morasaki '033 in combination further teach an EDI conversion interface for converting data into an EDI based document (Morasaki '033: paras [0044], [0045], and [0046]; Fig. 1), and converting the parsed data in the XML based schedule (Cox '379: col. 3, ln. 58 to

col. 4, ln. 7) into the EDI based document (Osipenko '96: Appendix B, Service Agreement DTD).

Claim 4:

Regarding Claim 3, all the limitations of Claim 2 are taught by Bryan '98, Cox '379, Osipenko '96, and Morasaki '033 in combination (supra), Further note, that Bryan '98, Cox '379, Osipenko '96, and Morasaki '033 in combination further teach, wherein in response to the regular receiving of the XML based schedule in the product manufacturer from each original equipment manufacturer a central processing unit in a computer of the computer system of the product manufacturer is commanded by the management system (Cox '379: col. 5, lns. 28-35)to perform the steps of:

- reading XML based forecast schedules sent from the computer of each original equipment manufacturer (Cox '379: col. 5, lns. 36-55; and Osipenko '96: Appendix B, Service Agreement DTD);
- parsing the XML based forecast schedules based on an XML syntax and a related nested structure rule contained in the XML parser interface (Cox '379: col. 5, lns. 36-55);
- analyzing the XML based forecast schedule for determining whether it complies with the XML syntax and the nested structure rules (Cox '379: col. 5, lns. 36-55);
- searching a pair of markups of an element in the XML based forecast schedule and reading text and data enclosed by the pair of markups if a result of the analysis step is positive (Cox '379: col. 5, lns. 36-55);

- converting the read text and data into the EDI based document based on the rule contained in the EDI conversion interface (Cox '379: col. 5, lns. 36-55; and Osipenko '96: Appendix B, Service Agreement DTD);
- storing the EDI based document in the database for integrating with the stored EDI based documents therein (Cox '379: col. 5, lns. 56-67; and Morasaki '033: Figs. 1 and 12-13; para [0120]).

4. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bryan '98, Cox '379, Osipenko '96, and Morasaki '033 in view of U.S. Patent No. 5,265,103 issued to Brightwell (hereafter Brightwell '103), and in further view of the publication, "The Windows (TM) Interface, An Application Design Guide," published by Microsoft Press, 1992 (hereafter Microsoft '92).

Claim 5:

Regarding Claim 5, Bryan '98, Cox '379, Osipenko '96, and Morasaki '033 in combination teach all the limitations of Claim 4 (supra). However, Bryan '98, Cox '379, Osipenko '96, and Morasaki '033 in combination do not explicitly teach displaying an error message and creating a packet for requesting the computer of the original equipment manufacturer to send the XML based forecast schedules again if the result of the analysis step is negative.

Brightwell '103 teaches a data communications system capable of retransmitting in event of error. Specifically, Brightwell '103 teaches creating a packet for requesting the computer of the original equipment manufacturer to send the XML based forecast schedules again if the result

of the analysis step is negative (Brightwell '103: col. 6, lns. 44-68). However, Brightwell '103 does not explicitly teach displaying an error message.

Microsoft '92 teaches displaying an error message (Microsoft '92: pp. 41-42, Section titled, "Textual Feedback").

It would have been obvious to a person having ordinary skill in the art to apply the retransmission mechanism of Brightwell '103 with the Bryan '98, Cox '379, Osipenko '96, and Morasaki '033 combination. The motivation to accomplish said application is suggested by Brightwell '103 which teaches the desirability of recovering from transmission errors and how the invention of Brightwell '103 accomplishes this (Brightwell '103: col. 1, lns. 22-26).

It would have been further obvious to a person having ordinary skill in the art to apply the error message of Microsoft 92 to the Bryan '98, Cox '379, Osipenko '96, Morasaki '033, and Brightwell '103 combination. The motivation to accomplish said application is suggested by Microsoft '92 which teaches the user interface principles of "feedback" and "forgiveness" i.e. that users should be notified of error conditions errors (Microsoft '92: pp. 4-5, sections labeled "Feedback" and "Forgiveness").

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- U.S. Patent Application Publication US2002/0112224 A1 by Cox, "XML Data Parser." Reference provides an alternative reference to the Cox '379 reference.

- U.S. Patent No. 6,154,738, issued to Call, "Methods and Apparatus for Disseminating Product Information Via the Internet Using Universal Product Codes." Reference teaches an alternate to the Morasaki '033 reference.
- Peat, Bruce; David Webber; "Introducing XML/EDI" published by the XML/EDI Group, August 1997. Reference provides a brief overview of XML/EDI.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick J.D. Santos whose telephone number is 703-305-0707. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic can be reached on 703-308-1436. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patrick J.D. Santos
March 2, 2004

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